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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,227	06/13/2001	Soichiro Kawakami	35.C9574 D5	4195

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EXAMINER

CHANEY, CAROL DIANE

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 04/08/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

14G

Office Action Summary

Application No.

09/879,227

Applicant(s)

KAWAKAMI ET AL.

Examiner

Carol Chaney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 123-178 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 123-178 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 123-158, drawn to a secondary battery which includes a film or layer associated with the negative electrode, classified in class 429, subclass 126.
- II. Claims 159-178, drawn to a secondary battery which includes a layer coating the cathode, classified in class 429, subclass 209.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation, different functions, and different effects.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Should the invention of group I be chosen, an election of one of the following groups must be made:

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1. A battery with a lithium anode having a conductive layer associated with the anode surface. Claims 123-126, 142, 144, 146, 147, 148, 152-157, 141 and 158.

2. A battery with a lithium anode having a semi-conductive layer associated with the anode surface. Claims 123-126, 142, 144, 146, 147, 148, 152-157, and 150.

3. A battery with a lithium anode having a non-conductive metal oxide layer associated with the anode surface. Claims 123-126, 142, 144, 146, 147, 148, 152-157, and 138.

4. A battery with a lithium anode having an electron donating layer on the anode surface. Claims 123-126, 142, 144, 146, 147, 148, 152-157, and 127-131.

5. A battery with a lithium anode having a layer of a large ring compound on the anode surface. Claims 123-126, 142, 144, 146, 147, 148, 152-157, and 133, 139, 140.

6. A battery with a lithium anode having a layer of a fluororesin compound on the anode surface. Claims 123-126, 142, 144, 146, 147, 148, 152-157, and 134, 139, 140.

7. A battery with a lithium anode having a layer of a compound with an ether linkage on the anode surface. Claims 123-126, 142, 144, 146, 147, 148, 152-157, and 135, 139, 140.

8. A battery with a lithium anode having a layer of a compound with a carbonyl group on the anode surface. Claims 123-126, 142, 144, 146, 147, 148, 152-157, and 136, 139, 140.

9. A battery with a lithium anode having a layer of a compound with phosphorous and nitrogen atoms double bonded on the anode surface. Claims 123-126, 142, 144, 146, 147, 148, 152-157, and 137, 139, 140.

10. A battery with a zinc anode having a conductive layer associated with the anode surface. Claims 123-126, 143, 145, 146, 147, 149, 152-157, 141 and 158.

11. A battery with a zinc anode having a semi-conductive layer associated with the anode surface. Claims 123-126, 143, 145, 146, 147, 149, 152-157, and 150.

12. A battery with a zinc anode having a non-conductive metal oxide layer associated with the anode surface. Claims 123-126, 143, 145, 146, 147, 149, 152-157, and 138.

13. A battery with a zinc anode having an electron donating layer on the anode surface. Claims 123-126, 143, 145, 146, 147, 149, 152-157, and 127-131.

14. A battery with a zinc anode having a layer of a large ring compound on the anode surface. Claims 123-126, 143, 145, 146, 147, 149, 152-157, and 133, 139, 140.

15. A battery with a zinc anode having a layer of a fluoro-resin compound on the anode surface. Claims 123-126, 143, 145, 146, 147, 149, 152-157, and 134, 139, 140.

16. A battery with a zinc anode having a layer of a compound with an ether linkage on the anode surface. Claims 123-126, 143, 145, 146, 147, 149, 152-157, and 135, 139, 140.

17. A battery with a zinc anode having a layer of a compound with a carbonyl group on the anode surface. Claims 123-126, 143, 144, 146, 147, 149, 152-157, and 136, 139, 140.

18. A battery with a zinc anode having a layer of a compound with phosphorous and nitrogen atoms double bonded on the anode surface. Claims 123-126, 143, 145, 146, 147, 149, 152-157, and 137, 139, 140.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 123-126, 146, 147, 152-157 are generic.

If the invention of group II is elected, an election of one of the following groups must be made:

19. A secondary battery with a lithium anode and a layer of a large ring compound associated with the cathode. (Claims 159, 177, and 160, 161, and 176.)

20. A secondary battery with a lithium anode and a layer of a polymer of a derivative of an aromatic hydrocarbon associated with the cathode. (Claims 159, 177, and 162, 163, 176.)

21. A secondary battery with a lithium anode and a layer of a fluororesin associated with the cathode. (Claims 159, 177, and 164, 165, 176.)

22. A secondary battery with a lithium anode and an insulating layer of a silicone resin associated with the cathode. (Claims 159, 177, and 166, 176.)

23. A secondary battery with a lithium anode and an insulating layer of an organic titanium polymer associated with the cathode. (Claims 159, 177 and 167, 176.)

24. A secondary battery with a lithium anode, and a layer of an insulating polymer of phosphorous and nitrogen associated with the cathode. (Claims 159, 177 and 168.)

25. A secondary battery with a lithium anode and a layer of an insulating inorganic glass associated with the cathode. (Claims 159, 177 and 169-171.)

26. A secondary battery with a lithium anode and an insulating carbide layer associated with the cathode. (Claims 159, 177 and 172, 176.)

27. A secondary battery with a lithium anode and an insulating nitride layer is associated with the cathode. (Claims 159, 177 and 173.)

28. A secondary battery with a lithium anode and a insulating halide layer is associated with the cathode. (Claims 159, 177 and 174, 175.)

29. A secondary battery with a zinc anode and a layer of a large ring compound associated with the cathode. (Claims 159, 178, and 160, 161, and 176.)

30. A secondary battery with a zinc anode and a layer of a polymer of a derivative of an aromatic hydrocarbon associated with the cathode. (Claims 159, 178, and 162, 163, 176.)

31. A secondary battery with a zinc anode and a layer of a fluororesin associated with the cathode. (Claims 159, 178, and 164, 165, 176.)

32. A secondary battery with a zinc anode and an insulating layer of a silicone resin associated with the cathode. (Claims 159, 178, and 166, 176.)

33. A secondary battery with a zinc anode and an insulating layer of an organic titanium polymer associated with the cathode. (Claims 159, 178 and 167, 176.)

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34. A secondary battery with a zinc anode, and a layer of an insulating polymer of phosphorous and nitrogen associated with the cathode. (Claims 159, 178 and 168.)

35. A secondary battery with a zinc anode and a layer of an insulating inorganic glass associated with the cathode. (Claims 159, 178 and 169-171.)

36. A secondary battery with a zinc anode and an insulating carbide layer associated with the cathode. (Claims 159, 178 and 172, 176.)

37. A secondary battery with a zinc anode and an insulating nitride layer is associated with the cathode. (Claims 159, 178 and 173.)

38. A secondary battery with a zinc anode and a insulating halide layer is associated with the cathode. (Claims 159, 178 and 174, 175.)

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 159 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

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Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol Chaney whose telephone number is (703) 305-3777. The examiner can normally be reached on Mon - Fri 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 703-308-2383. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Carol Chaney
Primary Examiner
Art Unit 1745

cc
April 6, 2003